

In the claims:

1. (currently amended): A method of enhancing the rendering of pixels in the case of opcode with a core loop that has above and below the normal table area boundary checks for the index to avoid accessing outside the lookup table area comprising the steps of:

determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table opcodes above and below said maximum and minimum values of said index and removing core loop checks.

2. (original): The method of Claim 1 wherein the expanding step includes the step of replicating the highest value if the index is above the normal table area.

3. (original): The method of Claim 1 wherein said opcodes are for shading.

4. (original) The method of Claim 1 wherein the expanding step includes the step of replicating the lowest value if the index is below the normal table area.

5. (currently amended) A printer comprising:

a printing device;

a printer controller for controlling said printing device, said printer controller including means for interpreting responsive to each line of source language to translate into machine language and then execute and wherein a figure to be printed is divided into graphics rendering primitives and means for rendering where each and every pixel in the primitive is a function of its position in the primitive, said means for rendering includes a lookup table that includes opcode values over all values of indexes wherein the index into the lookup table is calculated for every pixel using a base value and a gradient in both x and y

directions and said means for providing opcode values for all values of indexes includes an opcoder with a core loop that has above and below the normal table area boundary checks for the index to avoid accessing outside the lookup table area and means for determining maximum and minimum values of index of normal table area of a lookup table, and expanding the lookup table above and below said maximum and minimum values of said index by replicating the highest value if the index is above the normal table value and replicating the lowest value if the index is below the normal table area and removing core loop checks.

6. (previously presented) A raster image processor for preparing data for raster output comprising:

an interpreter for translating source language into machine language and dividing figure drawn into primitives, and

a rendering subsystem including a means for generating an index for each pixel in each of said pixels, said rendering subsystem including means for determining maximum and minimum values of index of normal table area of a lookup table and rendering an expanded lookup table for the entire range of index values and removing core loop checks, said rendering lookup table of said rendering subsystem has its highest and lowest values replicated above and below the normal table indexes so as to provide lookup table values for the entire range of indexes.

7. (canceled)